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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,515	02/27/2004	Paul Hammonds	194-34483-US	7737

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EXAMINER	
KRISHNAMURTHY, RAMESH	
ART UNIT	**PAPER NUMBER**
3753	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/789,515	HAMMONDS ET AL.	
	Examiner	Art Unit	
	Ramesh Krishnamurthy	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 20* is/are pending in the application.

4a) Of the above claim(s) *17 - 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 9 and 11 - 16* is/are rejected.

7)☒ Claim(s) *10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

This office action is responsive to communications filed 09/22/2006.

Claims 1 – 20 are pending.

1. Claims 17 – 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 05/04/2006.

Claims 1 – 16 remain for further consideration.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 3, 7 – 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Allyn (US 4,722,363).

Allyn discloses a method of introducing a drag reducer in to a hydrocarbon fluid stream flowing through a pipeline (11) the method comprising admixing two components – one from (16, 20) and the other from (24, 30) wherein the drag reducer components are admixed at the site of the fluid stream at desired rates. It is noted that the drag reducer in Allyn is a viscous-oil based additive and as such involves the combination of a chemical and an oil-based solvent forming a smaller number of components i.e. an additive-solvent mixture. In regard to claim 7, it is noted that in Allyn the incipient drag reducer comprises of the withdrawn pipeline fluid and the viscous oil based additive thus forming an essentially two-component mixture that has a smaller number of

components than the three components originally involved, i.e. viscous oil, the additive and the withdrawn fluid from the pipeline.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allyn (US 4,722,363) as applied to claims 1 – 3, 7 – 9 and 12 above, and further in view of Inomata et al. (US 2002/0008049 A1).

The patent to Allyn discloses the claimed invention with the exception of explicitly disclosing the hydrocarbon stream to be the product of passage through a desalter and/or a dehydrator.

Inomata et al. discloses (paragraph [0002]) that it is common practice in the art to provide pretreatments such as dehydration and desalting for the purpose of obtaining the separation of crude oil into desired component fractions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in Allyn the hydrocarbon stream that is the product of passage through a desalter and/or a dehydrator since it is common practice in the art to provide pretreatments such as dehydration and desalting for the purpose of obtaining the separation of crude oil into desired component fractions, as evident from Inomata et al.

7. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allyn (US 4,722,363) as applied to claims 1 – 3, 7 – 9 and 12 above, and further in view of Babenko (US 2002/0002994 A1).

The patent to Allyn discloses the claimed invention with the exception of explicitly disclosing varying the injection rate of the drag reducer based on a property of the fluid stream.

Babenko discloses that it is known in the art to vary the injection rate of the drag reducer (paragraph [0042]) based on the property of the fluid stream for the purpose of obtaining effective drag reduction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in Allyn varying the injection rate of the drag reducer based on a property of the fluid stream, for the purpose of obtaining effective drag reduction, as evident from Babenko.

8. Claims 13 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allyn (US 4,722,363) as applied to claims 1 – 3, 7 – 9 and 12 above, and further in view of Thompson et al. (US 6,849,581).

The patent to Allyn discloses the claimed invention with the exception of explicitly disclosing the first drag reducer component to be an aluminum monocarboxylate and the second component to be a carboxylic acid.

Thompson et al. discloses that it is known in the art to provide a drag reducer made from two components – a carboxylic acid and one or more metal salt of carboxylic acids (which here is taken to include both sets of drag reducer compositions recited in claims 13 and 14) for the purpose of obtaining desired drag reduction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in Allyn a drag reducer comprising carboxylic acid and a metal salt thereof for the purpose of obtaining a desired drag reduction, as recognized by Thompson et al.

9. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Allyn (US 4,722,363) .

The patent to Allyn discloses the claimed invention with the exception of explicitly disclosing the temperature of admixing the components to be either sub-ambient or supra-ambient.

To provide admixing of the components at either sub-ambient or supra-ambient temperatures is considered to be a design expedient over those features disclosed in

Allyn in that it neither provides any new and/or unexpected result nor solves any stated problem.

10. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Response to Arguments

12. Applicant's arguments filed 09/22/2006 have been fully considered but they are not persuasive.

Applicant's argument that the mixture of the withdrawn fluid and the oil-based additive is not an incipient drag reducer is unpersuasive. It is noted that Allyn does not disclose the injection of the oil-based additive directly into the pipeline. That is, **as** disclosed by Allyn, the incipient drag reducer is a portion of the fluid from the pipeline is withdrawn and admixed with the oil-based additive. It is noted that the mixture prior to injection is indeed an incipient drag reducer since no drag reduction has been accomplished prior to the injection, in Allyn. In regard to arguments concerning the combination of Allyn and Babenko, it is noted that the combination applies to claim 11 and not to claims 1 – 10 as cited on page 9 of the response from the applicants. In response to applicants' arguments the rejection of claim 10 has been withdrawn. In regard to arguments concerning the Thompson reference as set forth on page 11 of the

response, it is noted that the Thompson reference has been utilized for its teaching of the limitations in claims 13 and 14 only. Regarding the rejections of claims 15 and 16, it is noted that the applicants have not addressed the elements of the rejection as set forth in the office action.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (571) 272 – 4914. The examiner can normally be reached on Monday - Friday from 10:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel, can be reached on (571) 272 – 4929. The fax phone number for the organization where this application or proceeding is assigned is (571) 273 – 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramesh Krishnamurthy

Ramesh Krishnamurthy, Ph.D., PE
Primary Examiner
Art Unit 3753